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ABSTRACT

This report describes the results of two statewide surveys: (1) The 1991 Youth Risk Behavior Survey; and (2) The 1992 New Mexico School Health Education Survey. These findings are intended to be used by educators across New Mexico to help focus the development of effective school-based comprehensive health education programs. Childrens' health problems arise from a few preventable behaviors, such as drinking and driving and unprotected sexual intercourse. Tobacco use, excessive consumption of fats, and insufficient physical activity are known to lead to diseases which do not manifest themselves until adulthood, but originate from habits formed during adolescence. Effective educational programs are needed to reduce these priority health risk behaviors. Schools provide the best avenue for such programs. The results presented in this report can be used to identify adolescent needs, aid in developing curricula to meet those needs, and design effective teacher training. This report should be shared among school administrators, teachers, parents, and the community to gain informed support for school-based programs that incorporate the principles and components of effective comprehensive health education. A health education program must be as comprehensive as possible and should incorporate a coordinated, collaborative effort among schools, families, and the community. Contains 44 references. (RJM)

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Kids, Schools, & Health Where Do We Stand?

Results of the New Mexico 1991 Youth Risk Behavior and 1992 School Health Surveys

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SURVEY REPORT

1991 NEW MEXICO YOUTH RISK BEHAVIOR AND 1992 SCHOOL HEALTH EDUCATION SURVEYS

Prepared for the New Mexico State Department of Education

by

Research and Evaluation Program
Health Behavior Laboratory
University of Utah

This report was completed with support provided through cooperative agreement #U63-CCU607209-01 with the Division of Adolescent and School Health of the U.S. Centers for Disease Control
October, 1992

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INTRODUCTION

INTRODUCTION

This report describes the results of two recent statewide surveys: the 1991 Youth Risk Behavior Survey (YRBS) and the 1992 New Mexico School Health Education Survey (SHES). The YRBS was conducted by the New Mexico Department of Education in 1990 and again in 1991. Health education researchers at the University of Utah conducted the SHES survey in 1992 and prepared this report for the Department of Education AIDS Education Program. Fifty-one schools were randomly selected to participate in the state-level YRBS, and all 257 schools with students in grades 7 through 12 were asked to complete the SHES.

This report is intended for use by educators across New Mexico to help focus the development of effective school-based comprehensive health education programs. Permission is granted to quote or reproduce with credit to the New Mexico State Office of Education and the University of Utah. This report can also be shared with parents and other interested parties to inform these decision makers about the need for effective school health education programs in New Mexico.

The health problems experienced by youth are caused by a few preventable behaviors, such as drinking and driving and unprotected sexual intercourse. Tobacco use, excessive consumption of fats, and insufficient physical activity are known to lead to diseases which are not manifest until adulthood, but result from habits formed during adolescence. Effective educational programs are needed to reduce these priority health risk behaviors. Such programs are best delivered in and through schools. It is important that schools provide accurate information and repeated opportunities for students to develop skills that will enable them to reduce:

- Behaviors that result in unintentional and intentional injuries
- Tobacco use
- Alcohol and other drug use
- Behaviors that result in HIV infection, other sexually transmitted diseases, and unintended pregnancies
- Dietary patterns that result in disease
- Sedentary lifestyle

The results presented in this report can be used to identify adolescent needs, or choose or develop curricula to meet those needs, and design effective teacher training. This report should be shared among school administrators, teachers, parents, and the community to gain informed support for school-based programs that incorporate the principles and components of effective comprehensive health education.

SURVEY METHODS

SURVEY METHODS

The Youth Risk Behavior Survey (YRBS) was designed by experts nationwide through the Centers for Disease Control to measure the extent to which adolescents engage in health risk behaviors including behaviors that result in intentional and unintentional injuries; tobacco, alcohol, and other drug use; sexual behaviors; dietary patterns that result in disease; and sedentary lifestyle.

The 1991 New Mexico YRBS was approved for use in New Mexico schools by the State Office of Education and its Advisory Committee. Randomly selected school districts each made the decision to participate in the survey and decided whether and how parental consent would be sought.

Of the fifty-one schools randomly selected to participate, thirty-seven schools participated and returned completed surveys. During Spring, 1991, students in randomly selected classes were asked to complete the YRBS questionnaire. Eighty-nine percent (3,137) of student answer sheets were usable, for an overall response rate of 73 percent. Results have been weighted statistically to allow readers to make important inferences about the priority health risk behaviors of all students in grades 9 through 12 in New Mexico.

A separate survey, the 1992 New Mexico School Health Education Survey (SHES) was delivered by mail to 258 schools during Spring, 1992. The SHES was designed to assess the extent to which schools in New Mexico provide HIV education in the context of health education, and the resources devoted and strategies utilized in providing this instruction. A contact person designated by each school's principal was asked to complete the survey. Two hundred thirty-six completed surveys were returned in prepaid envelopes for computer file coding and data analysis. Overall, a response rate of 91% was achieved, allowing data to be statistically weighted to represent all secondary schools in New Mexico.

YOUTH RISK BEHAVIOR SURVEY RESULTS

YOUTH RISK BEHAVIOR SURVEY RESULTS

Of the 3,137 students participating in the 1991 New Mexico YRBS, 51.9% (1,629) were male and 47.7% (1,496) were female. By grade, 28.2% were enrolled in the 9th grade, 28.0% in the 10th grade, 21.4% in the 11th grade, and 18.8% in the 12th grade (3.6% were ungraded or in other grades). Of the students responding to the survey, 26.2% described themselves as white, 1.8% as black, 33.6% as Hispanic and 38.1% described themselves as Native American or Alaskan Native or other. Data were configured to represent all grade 9 through 12 public school students in New Mexico.

To facilitate an understanding of the need for effective school-based health education programs in New Mexico, this section of the report includes the following information for each priority health risk behavior:

- Summary statements from the U.S. Centers for Disease Control (CDC) about the consequences of engaging in the various health risk behaviors and statistics from other sources regarding these risk behaviors that are specific to New Mexico
- Adolescent Health Objectives for the Year 2000 from the U.S. Department of Health and Human Services, Public Health Service (PHS)
- 1991 New Mexico YRBS results depicted in graph- and bullet-statement-form.

This presentation format will allow the reader to draw conclusions about the importance of the priority health risk behaviors, the extent to which New Mexico students engage in these behaviors, and the need for effective educational programs to reduce these behaviors. Suggestions for how to address these needs are included in a Summary and Conclusions section. Perhaps these results will begin to serve the people of New Mexico as they prepare their youth to lead healthy, productive lives.

Intentional and Unintentional Injuries

Injuries are the third leading cause of death for all ages in New Mexico and the number one cause of death for those age 1-44 (New Mexico Department of Health, 1992a).

Intentional and Unintentional Injuries

New Mexico's injury death rate for children ages 1-19 is 38.2 per 100,000 and is higher than the national rate. Injuries to children and adolescents in New Mexico account for more potential years of life lost than the three leading causes of death in New Mexico combined (New Mexico Department of Health, 1991). Homicides, suicides, and motor vehicle accidents in New Mexico accounted for 83.0% of all fatalities for 15-24 year olds in 1990 (New Mexico Department of Health, 1992a).

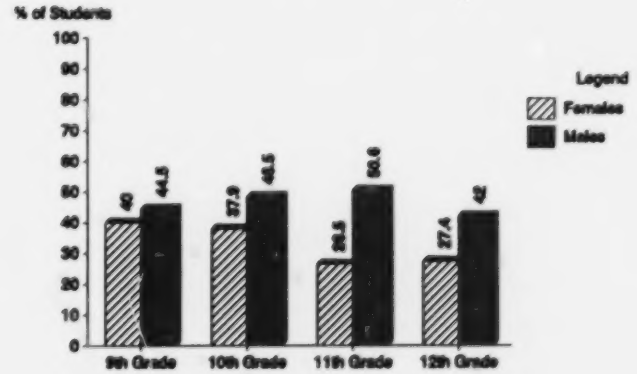
Seat Belt Use

Of the 335 people who were killed in automobile accidents in New Mexico during 1991, 78.0% were not wearing seat belts (New Mexico Department of Health, 1992c). Seat belt use is estimated to reduce motor vehicle fatalities by 40% to 50% and serious injuries by 45% to 55% (National Committee for Injury Prevention and Control, 1989). Increasing use of automobile safety restraint systems to 85% could save an estimated 10,000 American lives per year (U.S. Department of Health and Human Services, 1990a). Seat belt use in New Mexico could save as many as 130 lives.

Year 2000 Objectives:

Increase use of occupant protection systems, such as safety belts, inflatable safety restraints, and child safety seats, to at least 85% of motor vehicle occupants.

New Mexico YRBS Results:



- 30.5% of all students reported "Always" wearing a seatbelt, and 28.5% reported wearing a seatbelt "Most of the Time."

Percentages of All Students Who Reported Never, Rarely, or Sometimes Wearing Seatbelts When Riding in a Car Driven By Someone Else

Motorcycle and Bicycle Safety

Thirty-nine motorcyclists were killed in New Mexico during 1991. Of the motorcyclists killed, 35.9% (n = 14) of them were under the age of 25 and 80.0% (n = 31) of them were not wearing helmets (New Mexico Department of Health, 1992c). Four bicyclists were killed in New Mexico during 1991 (New Mexico Department of Health, 1992c).

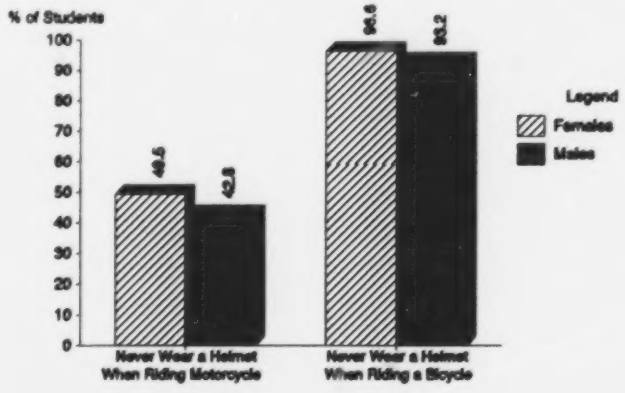
Head injury is the leading cause of death in motorcycle and bicycle crashes (National Committee for Injury Prevention and Control, 1989). Unhelmeted motorcyclists are two times more likely to incur a fatal head injury and three times more likely to incur a nonfatal head injury than helmeted riders (National Highway Traffic Safety Administration, 1980). In addition, the risk of head injury for unhelmeted bicyclists is more than 6 1/2 times greater than for helmeted riders (Thompson, Rivara, & Thompson, 1989).

Year 2000 Objectives:

Increase use of helmets to at least 80% of motorcyclists and 50% of bicyclists.

New Mexico YRBS Data:

- 52.4% of all male students and 70.3% of all female students did not ride a motorcycle in the past year.
- 47.7% of males who rode a motorcycle (47.6%) and 21.5% of females who rode a motorcycle (29.7%) rode more than 10 times in the past 12 months.
- 25.1% of all males and 35.8% of all females did not ride a bicycle in the past year.



Percentages of Students Who Rode Motorcycles (39.4%) or Bicycles (69.9%) Who Reported Never Wearing a Helmet While Riding

- 54.3% of males who rode a bicycle (74.9%) and 37.6% of females who rode a bicycle (64.2%) rode more than 10 times in the past 12 months.

Motor Vehicle Safety

From 1988-1990, motor vehicle accidents accounted for 41.4% of the deaths of youth age 15-24 in New Mexico (New Mexico Department of Health, 1992a). Motor vehicle accident mortality for this age group is 65% higher than expected based on national data (New Mexico Department of Health, 1992). During 1990, 58% of all fatal car accidents in New Mexico were alcohol-related (New Mexico Department of Health, 1991).

Automobile crash injuries, more than half of which involve alcohol (U. S. Department of Health and Human Services, 1990b), are the leading cause of death among youth age 15-24 in the United States (National Highway Traffic Safety Administration, 1988). Alcohol-related traffic accidents cause serious injury and disability and are the leading cause of spinal cord injury among young adults (National Highway Traffic Safety Administration, 1987).

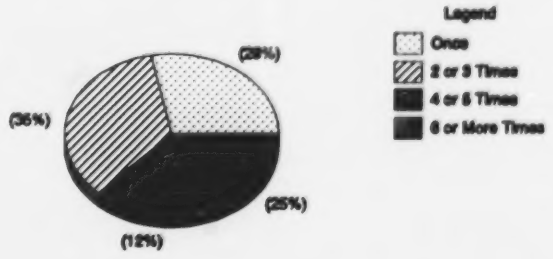
Year 2000 Objectives:

Reduce deaths among youth age 15-24 caused by motor vehicle crashes to no more than 33 per 100,000 people.

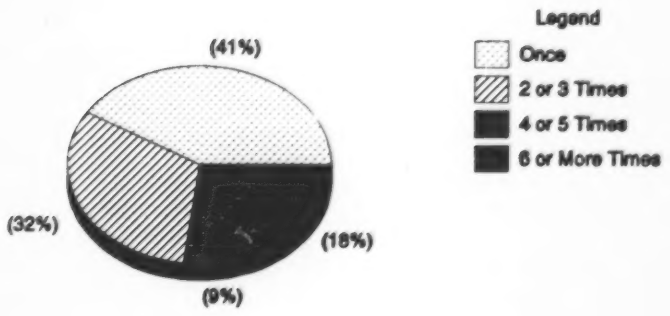
Reduce deaths among people age 15-24 caused by alcohol-related motor vehicle crashes to no more than 18 per 100,000.

New Mexico YRBS Data:

- 47.3% of all students reported that at least once in the past 30 days they had been in a car driven by someone who had been drinking. 36.6% of these students had done so 4 or more times in the past 30 days.



Percentage of Those Students (47.3%) Who Rode in a Vehicle in the Past Month Driven by Someone Who Had Been Drinking, by Number of Times



Percentages of Students 16 Years or Older (28.4%) Who Reported That in the Past 30 Days They Drove a Vehicle After Drinking, by Number of Times

- 24.0% of 12th grade females and 43.9% of 12th grade males drove while drinking in the past 30 days.

Carrying of Weapons

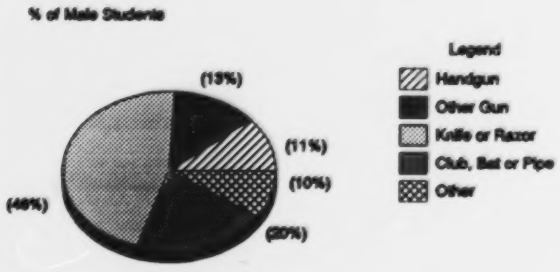
11.2% of all fatalities among 15-24 year olds in New Mexico was due to homicide from 1988-1990. This was the third leading cause of death in this age range (New Mexico Department of Health, 1992a).

Approximately nine out of ten homicide victims in the U.S. are killed with a weapon of some type, such as a gun, knife, or club. Nationally, homicide is the second leading cause of death among all adolescents (National Center for Health Statistics, 1990a) and the leading killer of black adolescents (U.S. Department of Health and Human Services, 1990b).

Year 2000 Objectives:

Reduce by 20% the incidence of weapon-carrying by adolescents age 14-17.

New Mexico YRBS Data:



Percentages of All Male Students (45.7%) Who Carried Weapons in the Past Month, By Type of Weapon

- 45.7% of all male students reported carrying a weapon in the past month. In the 1990 survey 37.2% of male students reported carrying a weapon in the month prior to the survey.
- Fewer than 11% of all females reported carrying a weapon in the past 30 days.
- 24.4% of all males and 3.5% of all females reported carrying a weapon more than five days during the past 30 days.
- Of the students (28.6%) who reported carrying weapons in the past 30 days, 11.1% of the males and 8.9% of the females carried a handgun most often.
- Of the students (28.6%) who reported carrying weapons in the past month, knives were carried most often by 68.3% of the females and 46.5% of the males.

Physical Fighting

Fighting is the most important antecedent behavior for a great proportion of homicides among adolescents (U.S. Department of Health and Human Services, 1990a). The immediate accessibility of a firearm or other lethal weapon often is the factor that turns a violent altercation into a lethal event (Rivara, 1985). Unintentional firearm-related fatalities are a critical problem among children and young adults in the United States (Wood & Mercy, 1988).

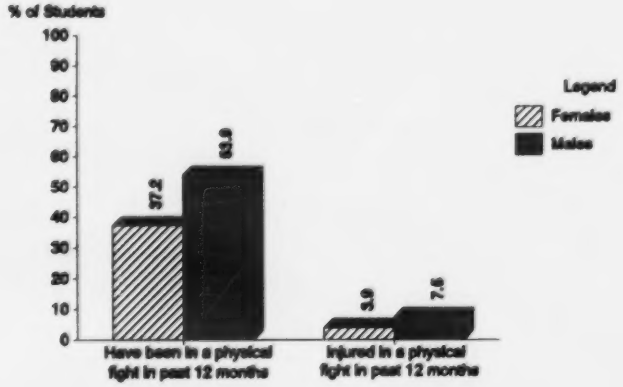
Year 2000 Objectives:

Reduce by 20% the incidence of physical fighting among adolescents age 14-17.

New Mexico YRBS Data:

- 27.3% of all males reported fighting with a friend or someone they know, the last time they were in a physical fight, while 16.9% fought with a stranger. In the 1990 survey, males fought more with strangers than with friends.

- 17.1% of all females reported fighting with a parent, brother, sister, or family member the last time they were in a physical fight.



Percentages of All Students Involved and/or Injured in a Physical Fight in the Past 12 Months

- More students have had physical fights this year than last year. In the 1991 YRBS, 72.7% of males and 52.0% of females stated they had been in a physical fight. In 1990, 51.6% males and 32.0% female had been in a physical fight.

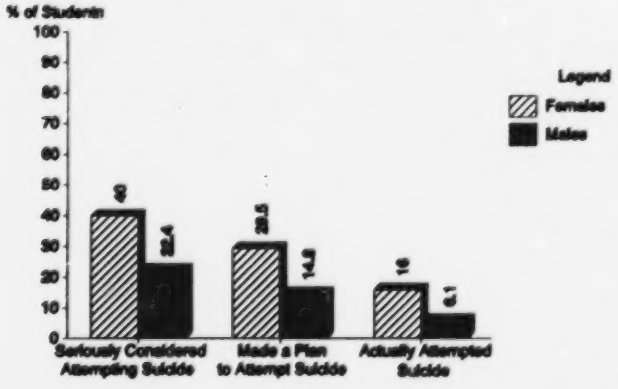
Suicide

During 1991, suicide accounted for 16.8% of all fatalities in youth age 15-24 in New Mexico. Suicide mortality is 117% higher than expected based on national data (New Mexico Department of Health, 1992a). This was the second leading cause of death in this age range in New Mexico (New Mexico Department of Health, 1992a). Nationally, suicide is the third leading cause of death among youth age 15-24 and the second leading cause of death among white males age 15-24 (National Center for Health Statistics, 1990b). The suicide rate for persons age 15-24 has tripled since 1950 (U.S. Department of Health and Human Services, 1990b).

Year 2000 Objectives:

Reduce by 15% the incidence of injurious suicide attempts among youth age 14-19.

New Mexico YRBS Data:



Percentages of Students by Gender Who Reported Seriously Considering Suicide, Making a Plan for Suicide and/or Actually Attempting Suicide in the Past 12 Months

- Of those who attempted suicide (10.6%) in the past 12 months, 30.2% reported the attempt resulted in an injury, poisoning, or overdose that had to be treated by a physician or nurse.
- 22.1% of 9th grade females reported attempting suicide in the past year as compared to 10.8% of 12th grade females. 20.7% 9th grade females reported attempting suicide in the 1990 YRBS.

It is clear that students in New Mexico are engaging in behaviors that result in preventable injury and death.

Tobacco, Alcohol, and Other Drug Use

"All races in New Mexico experience an excess mortality due to alcoholism" (New Mexico Department of Health, 1992a).

Tobacco, Alcohol, and Other Drug Use

Tobacco Use

Tobacco use is the single most important preventable cause of death in the United States, accounting for one of every six deaths in the United States. Smoking is a major risk factor for heart disease; chronic bronchitis; emphysema; and cancers of the lung, larynx, pharynx, mouth, esophagus, pancreas, and bladder (Office on Smoking and Health, 1989). In New Mexico, cancer and heart disease account for 27% of all years of potential life lost (New Mexico Department of Health, 1992a). If 29% of the 70 million children now living in the United States smoke cigarettes as adults, then at least 5 million of them will die of smoking-related diseases (Office on Smoking and Health, 1989). In addition, smoking is related to poor academic performance and the use of illicit drugs and alcohol (Johnston, O'Malley, & Bachman, 1987). Over one million teenagers begin smoking each year (U.S. Department of Health and Human Services, 1990b).

Oral cancer occurs more frequently among smokeless tobacco users than nonusers and may be 50 times as frequent among long-term snuff users. Smokeless tobacco use can lead to the development of oral leukoplakia and gingival recession and can cause addiction to nicotine (Public Health Service, 1986). Between 1970 and 1986, the prevalence of snuff use increased 15 times and chewing tobacco use increased four times among men age 17-19 (Office on Smoking and Health, 1989).

Year 2000 Objectives:

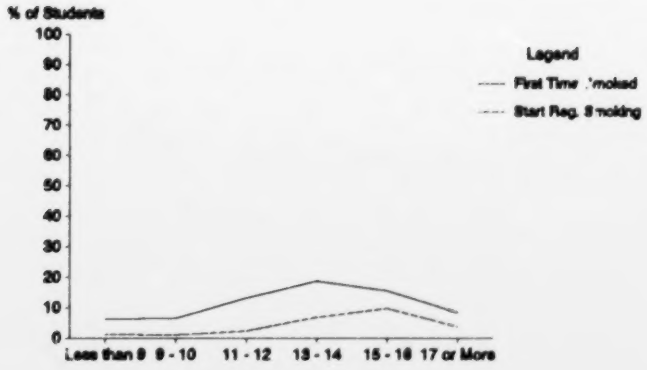
Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents age 12-17.

Reduce the initiation of cigarette smoking by children and youth so that no more than 15% have become regular cigarette smokers by age 20.

Reduce smokeless tobacco use by males age 12-24 to a prevalence of no more than 4%.

New Mexico YRBS Data:

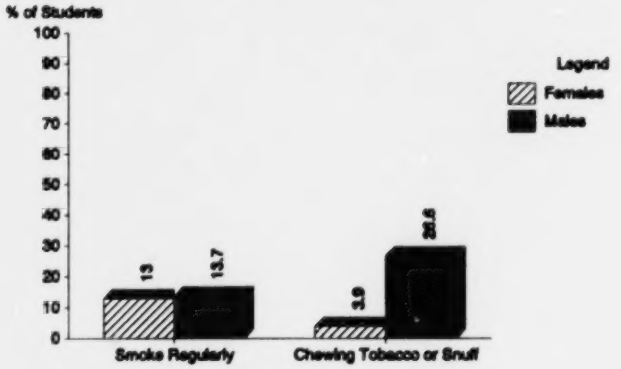
- For all students, the median age of first use of cigarettes was 13 years old.
- 53.2% of all females and 47.9% of all males reported they have already tried cigarette smoking or they think they will try smoking in the next 12 months.



Age at Which 12th Grade Students First Smoked a Whole Cigarette and/or Age When 12th Grade Students Reported They Started Smoking Regularly

- 24.5% of all students responded that they have smoked regularly.
- 10.3% of all students smoked cigarettes all days during the past 30 days.
- In 1990, 15.4% of all males and 13.5% of all females reported smoking on school property some time during the month prior to the YRBS.
- Of those students (33.8%) who reported they smoked during the past 6 months, 55.9% indicated they did try to quit smoking cigarettes during that time period.

- 32.9% of all 12th grade males reported having used chewing tobacco or snuff during the past 30 days as compared to 4.3% of the 12th grade females.
- In 1990, 20.6% of 12th grade males, and 3.6% of 12th grade females reported having used chewing tobacco or snuff 30 days prior to the YRBS.



Percentages of Students by Gender Who Reported They Smoked Regularly or Used Chewing Tobacco or Snuff in the Past 30 Days

Alcohol Use

Alcohol is a major factor in approximately half of all homicides, suicides, and motor vehicle crashes (Perrine, Peck, & Fell, 1988) which are the leading causes of death and disability among young people (U.S. Department of Health and Human Services, 1990b). Alcoholism mortality in New Mexico for 25-44 year olds is over 4 times what would be expected based on national data. Heavy drinking among youth has been linked conclusively to physical fights, destroyed property, academic and job problems, and trouble with law enforcement authorities (Dryfoos, 1987). Approximately 100,000 American deaths per year are attributable to misuse of alcohol (U.S. Department of Health and Human Services, 1990b).

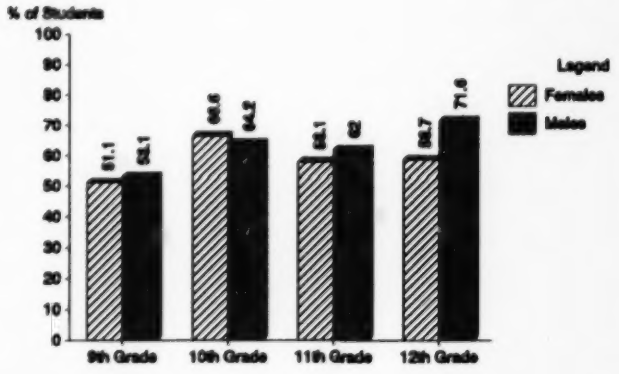
Year 2000 Objectives:

Reduce the proportion of young people who have used alcohol in the past month to 12.6% of youth age 12-17 and 29.0% among youth age 18-20.

Reduce the proportion of high school seniors and college students engaging in recent occasions of heavy drinking of alcoholic beverages to no more than 28% of high school seniors and 32% of college students.

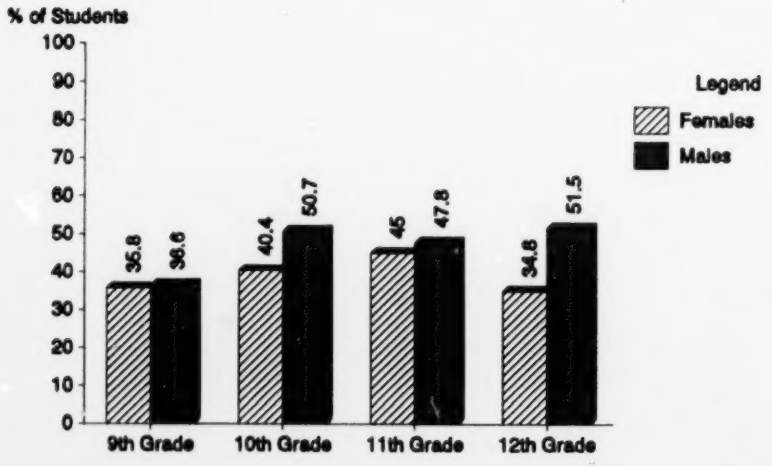
New Mexico YRBS Data:

- 20.5% of all students estimated they had at least one drink of alcohol on at least 100 days in their life.
- 28.2% of all 12th grade males and 16.5% of all 12th grade females estimated they had at least one drink of alcohol on at least 100 days in their life.
- 13.5% of all students this year reported they had never drank alcohol. The year before, 11.1% of all students reported they had never drank alcohol.



Percentages of All Students Who Drank Alcohol on at Least 1 Day During the Past 30 Days

- 39.2% of 12th grade students reported having had a drink on at least 3 days in the past 30 days.



Percentages of All Students Who Reported That They Drank 5 or More Drinks on 1 or More of the Past 30 Days

- 20.0% of all students reported they had 5 or more drinks in a row on 3 or more days during the past month.

Other Drug Use

One in four American adolescents is estimated to be at very high risk for the consequences of alcohol and other drug problems (Dryfoos, 1987). Drug abuse is related to morbidity and mortality due to injury, early unwanted pregnancy, school failure, delinquency, and transmission of sexually transmitted diseases, including HIV infection (U.S. Department of Health and Human Services, 1990a). Despite improvements in recent years, illicit drug use is greater among high school students and other young adults in America than in any other industrialized nation in the world (Johnston, O'Malley, & Bachman, 1989).

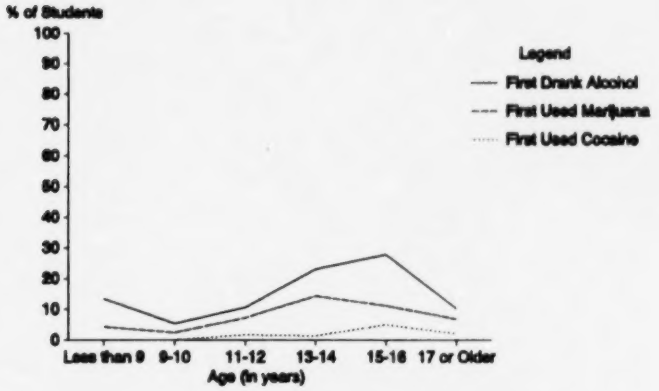
Year 2000 Objectives:

Increase by at least 1 year the average age of first use of cigarettes, alcohol, and marijuana by adolescents age 12-17.

Reduce the proportion of young people who have used marijuana in the past month as follows: 3.2% of youth age 12-17 and 7.8% of youth age 18-20 (marijuana use); 0.6% of youth age 12-17 and 2.3% of youth age 18-20 (cocaine use).

Reduce to no more than 3% the proportion of male high school seniors who use anabolic steroids.

New Mexico YRBS Data:



Reported Age When 12th Grade Students Began Drinking Alcohol, Using Marijuana, and Using Cocaine

- 17.7% of all students reported smoking marijuana at least once during the past 30 days.
- 6.1% of all students reported smoking marijuana regularly.

- 9.6% of all students reported having used cocaine at least once during their lifetime and 5.2% of all students reported having used the crack or freebase forms of cocaine in their lifetime.

- 3.1% of all students reported using cocaine at least once during the past month.

- 21.4% of all students indicated they have used other drugs, such as pills without a doctor's prescriptions, LSD, PCP, ecstasy, mushrooms, speed, ice, or heroin at least once in their lifetime.

- 4.4% of 12th grade males and 5.1% of 9th grade males reported having taken steroid pills or shots without a doctor's prescription.

- When asked if they had ever injected or shot up illegal drugs, 8.4% of all the students responded that they had. 9.3% of all 9th grade students indicated they had injected or shot up illegal drugs.

A large percentage of New Mexico adolescents are using tobacco, alcohol, and other drugs putting them at risk for preventable diseases and injuries.

Behaviors That Result in HIV Infection, Other Sexually Transmitted Diseases, and Unintended Pregnancy

"As of May 31, 1991, 691 cases of AIDS among teenagers (ages 13-19) in the U.S. were reported to the Centers for Disease Control. However, more than 20 percent (35,635) of persons reported with AIDS are in their 20's. Given the average ten year period between infection and onset of symptoms, the majority of these people were probably infected with HIV during their teenage years" (Centers for Disease Control, 1991).

Sexual Behaviors That Result in HIV infection, Other Sexuality Transmitted Diseases, and Unintended Pregnancy

AIDS/HIV Risk and Prevention Education

As of June 30,1992, 516 cases of AIDS and 322 deaths attributed to AIDS were reported in New Mexico. Before June 30, 1991, 5% of the AIDS cases were in youth 10-19, in one year this increased to 7%. (New Mexico Department of Health, 1992a).

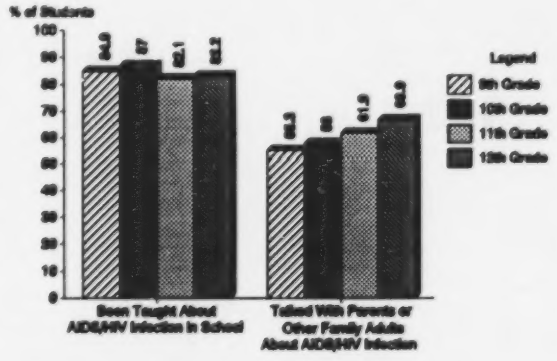
Acquired immunodeficiency syndrome (AIDS) is the only major disease in the United States for which mortality is increasing (U.S. Department of Health and Human Services, 1990b). AIDS is the 7th leading cause of death for youth age 15-24 (National Center for Health Statistics, 1989) and is the 7th leading cause of years of potential life lost before age 65 in the United States (Centers for Disease Control, 1989a).

In a 1990 survey of New Mexico adolescents, 47.1% of all 9th through 12th grade students indicated that they have not talked with their parents about AIDS and HIV infection. In a 1986 national survey, teens said they would like to communicate more about sex and HIV infection with their parents. Half of the teens in a 1988 survey said their parents have not provided enough information about sex and they want more discussion about sex with their parents (Miller & Laing, 1989).

Year 2000 Objectives:

Confine the prevalence of HIV infection to no more than 800 per 100,000.

New Mexico YRBS Results:



Percentage of Students By Grade Who Reported Having Been Taught in School and/or Having Talked With Parents or Other Family Adults About HIV Infection and AIDS

Sexual Behaviors

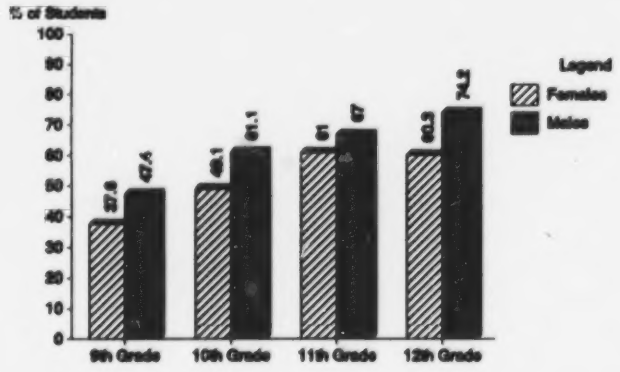
Major risks of early sexual activity include unwanted pregnancy and sexually transmitted diseases (STDs) including HIV. Number of partners and age at first intercourse are associated with STDs. Alcohol and drug use may be predisposing factors for initiation of sexual activity and unprotected intercourse (Hofferth & Hayes, 1987). Nationally, the average age of first sexual intercourse is 16.2 for girls and 15.7 for boys (Hayes, 1987). About one fourth of girls and one third of boys have had intercourse by age 15 (Baldwin, 1990; Sonenstein, Pleck, & Ku, 1989). Among all teens, 77% of females and 86% of males are sexually active by age 20 (National Center for Health Statistics, 1988).

Year 2000 Objectives:

Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15% by age 15 and no more than 40% by age 17.

Increase to at least 40% the proportion of sexually active adolescents age 17 and younger who have abstained from sexual activity for the previous three months.

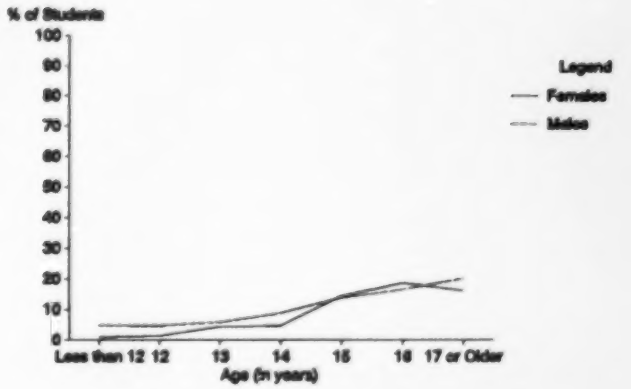
New Mexico YRBS Results:



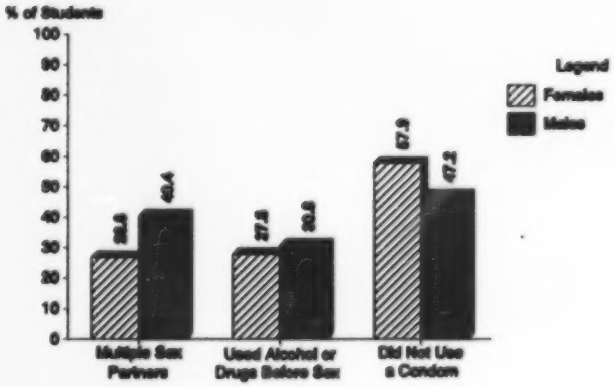
- 42.5% of all 9th grade students and 67.7% of all 12th grade students reported having had sexual intercourse.
- One third of ever sexually active students reported they abstained from sexual intercourse for the previous 3 months.

Percentages by Grade and Gender of Students Who Reported Ever Having Had Sexual Intercourse

- Of 12th grade students, 60.3% of females and 74.2% of males reported having had sexual intercourse.
- One out of six 12th grade students reported having sexual intercourse by age 14.
- 49.5% of all 12th grade students reported having had sexual intercourse by age 16.



Age by Gender of First Sexual Intercourse Reported by 12th Grade Students



Percentages of Sexually Active Students (55.8%) Who Reported Having Engaged in High-Risk Sexual Behaviors

- Of students (55.8%) reporting having had sexual intercourse, 19.5% reported they had intercourse with more than one partner in the past 3 months.
- Of those students (55.8%) who have ever had sexual intercourse, 29.7% indicated they used alcohol or drugs before the last time they had intercourse.

Sexually Transmitted Diseases

During 1991 in New Mexico, 321 new cases of gonorrhea and 14 new cases of syphilis were reported (New Mexico Department of Health, 1992b). Every year, 2.5 million U.S. teenagers are infected with an STD; this number represents approximately one out of every six sexually active teens and one-fifth of the national STD cases (Centers for Disease Control, 1989b). Of the 12 million new cases of STD per year, 86% are among people age 15-29 (Division of Sexually Transmitted Diseases, 1990). STDs may result in infertility, adverse effects on pregnancy outcome and maternal and child health, and facilitation of HIV transmission (U.S. Department of Health and Human Services, 1990b).

Year 2000 Objectives:

Increase to at least 60% the proportion of sexually active, unmarried young women age 15-19 who used a condom at last sexual intercourse.

Increase to at least 75% the proportion of sexually active, unmarried young men age 15-19 who used a condom at last sexual intercourse.

Reduce gonorrhea among adolescents age 15-19 to no more than 750 cases per 100,000 people.

New Mexico YRBS Results:

- Of those female students (49.4%) who are sexually active, 42.1% indicated a condom was used the last time they had sexual intercourse.
- Of those male students (61.4%) who are sexually active, 52.8% of them reported they used a condom the last time they had sexual intercourse.
- When asked if they had ever been told by a doctor or nurse they had a sexually transmitted disease, 6.0% of all students responded they had.

Unintended Pregnancies

One of ten teenage girls in the U.S. becomes pregnant each year, over 400,000 teens have abortions, and nearly 470,000 give birth (Henshaw & Van Vort, 1989; Hofferth & Hayes, 1987). The percentage of births to single mothers in New Mexico rose 35.5% in 1990 (New Mexico Department of Health, 1992a). In New Mexico during 1990, 6.0% of all births were to mothers under age 18 (New Mexico Department of Health, 1992a). Nationally, teens account for one third of all unintended pregnancies, with 75% of teenage pregnancies occurring among teens who do not practice contraception (Westoff, 1988). The U.S. leads all other developed countries in adolescent pregnancy, abortion, and childbearing (Hofferth & Hayes, 1987).

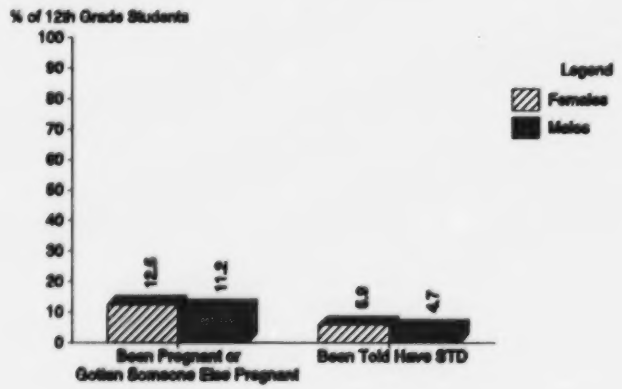
Year 2000 Objectives:

Reduce pregnancies among girls age 17 and younger to no more than 5%.

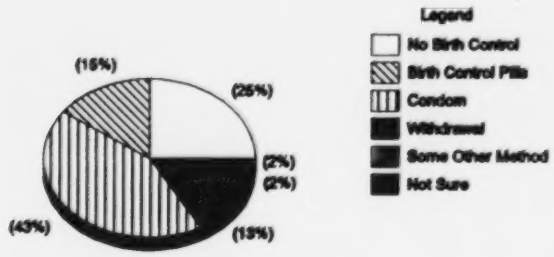
Increase to at least 90% the proportion of sexually active, unmarried people age 19 and younger who use contraception, especially combined method contraception that effectively prevents pregnancy and provides barrier protection.

New Mexico YRBS Results:

- 11.8% of 12th grade females and males report having been pregnant or gotten someone pregnant.



Percentage of 12th Grade Students Who Reported They Have Been or Gotten Someone Else Pregnant or Been Told They Have an STD



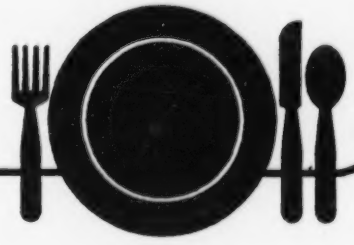
Reported Kinds of Birth Control Used by Sexually Active Students the Last Time They Had Intercourse

- Of those students (55.6%) who have had sexual intercourse, 27.0% of the females and 23.7% of the males reported no birth control method was used the last time they had sexual intercourse.

It is clear that New Mexico adolescents are engaging in sexual behaviors that put them at risk for HIV infection, other sexually transmitted diseases, unintended pregnancy, and other social problems.

Dietary Excesses and Imbalances

39.3% of all female students and 23.7% of all male students in New Mexico believe they are overweight.



Dietary Excesses and Imbalances

Obesity and Eating Disorders

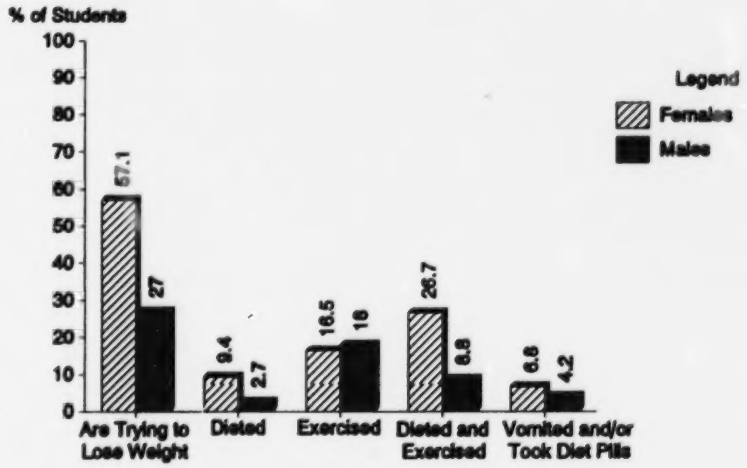
Obesity and extreme obesity appear to be increasing by as much as 39% and 64%, respectively, among youth age 12-17 (Gortmaker, Dietz, Sobol & Wehler, 1987). Obesity acquired during adolescence may persist into adulthood, increasing later risk for chronic conditions such as diabetes, heart disease, high blood pressure, stroke, some cancer, and gall bladder disease (Public Health Service, 1988). Also, adolescents often experience social and psychological stress related to obesity (Rotatori & Fox, 1989). Overemphasis on thinness can contribute to eating disorders (Public Health Service, 1988).

Year 2000 Objectives:

Reduce overweight to a prevalence of no more than 20% among people age 20 and older and no more than 15% among adolescents age 12-19.

Increase to at least 50% the proportion of overweight people age 12 and older who adopt sound dietary practices combined with regular physical activity to attain an appropriate body weight.

New Mexico Data:



Percentages of Students Who Reported They Are Trying to Lose Weight and the Methods of Weight Control Used During the Past Week

- 15.1% of all females and 23.3% of all males believe they are underweight.
- 39.3% of all females and 23.7% of all males believe they are overweight.
- 57.1% of all females and 27.0% of all males are trying to lose weight.
- 26.7% of all females and 8.8% of all males exercised and dieted to lose weight during the past week.
- During the past 7 days, 6.8% of the females vomited, took diet pills, or both to lose weight.

Nutrition Habits

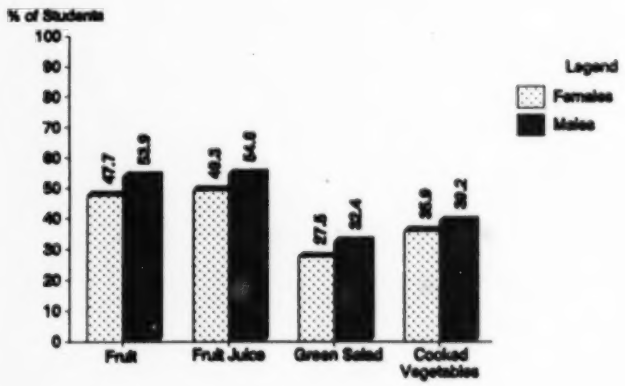
Americans currently consume more than 36% of their total calories from fat. High fat diets, which are associated with increased risk of obesity, heart disease, some types of cancer, and other chronic conditions, often are consumed at the expense of food high in complex carbohydrates and dietary fiber, considered more conducive to health (Public Health Service, 1988). Because lifetime dietary patterns are established during youth, adolescents should be encouraged to choose nutritious foods and to develop healthy eating habits (Select Panel for the Promotion of Child Health, 1981).

Year 2000 Objectives:

Reduce dietary fat intake to an average of 30% of calories or less and average saturated fat intake to less than 10% of calories among people age 2 and older.

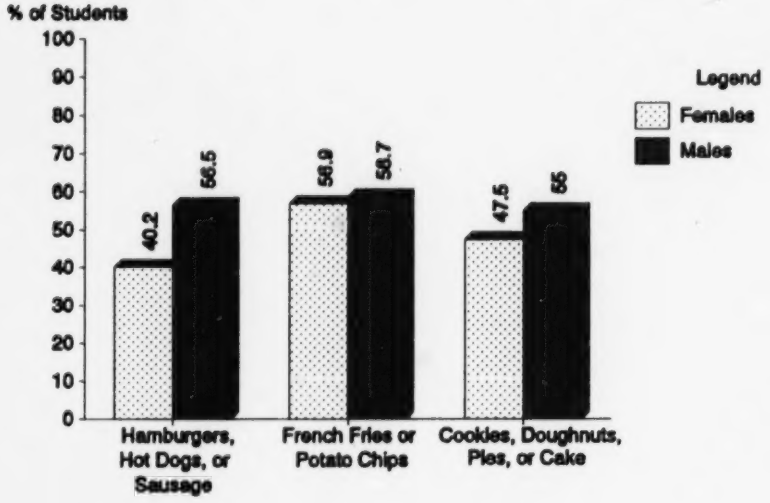
Increase complex carbohydrate and fiber-containing foods in the diets of adults to five or more daily servings for vegetables (including legumes) and fruits, and to six or more daily servings for grain products.

New Mexico Data:



What Students Ate the Previous Day

- 37.7% of all students reported they ate cooked vegetables the day prior to the survey.
- 31.2% reported they ate green salad the day prior to the survey.
- 51.1% of all students reported they ate fruit the day before the survey.



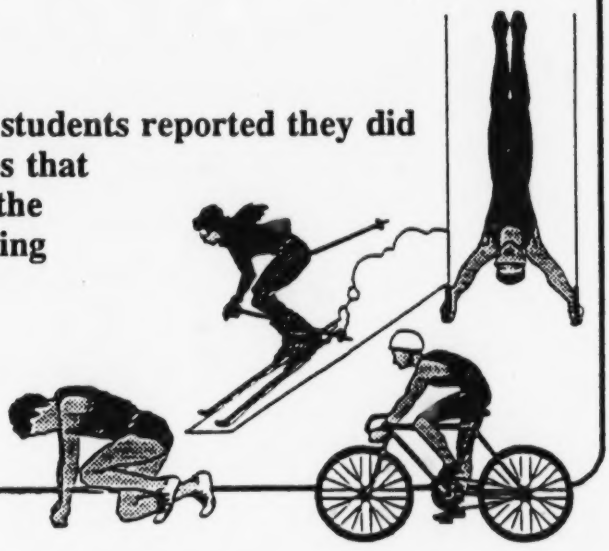
What Students Ate the Previous Day

- 48.9% of all the students reported they ate hamburgers, hot dogs, or sausage the day before the survey.
- Of all those participating in the survey, 57.9% of the students indicated they ate french fries or potato chips the day before the survey.
- 51.5% of all the students responded that they ate cookies, doughnuts, pies, or cake the day prior to the survey.

It is clear that students in New Mexico are engaging in nutritional behaviors that put them at risk for the most significant mortality, morbidity, and social problems associated with poor dietary habits.

Physical Inactivity

33.9% of all New Mexico students reported they did not participate in activities that made them sweat or breathe hard 3 or more times during the past 7 days.



Physical Inactivity

Regular physical activity increases life expectancy (Paffenbarger, Hyde, Wing, & Hsieh, 1986). Additionally, regular physical activity can assist in the prevention and management of coronary heart disease, hypertension, diabetes, osteoporosis, obesity, and mental health problems (Harris, Caspersen, DeFriese, & Estes, 1989). The quantity and quality of school physical education programs have a significant positive effect on the health-related fitness of children (U.S. Department of Health and Human Services, 1985, 1987).

Year 2000 Objectives:

Increase to at least 30% the proportion of people age 6 and older who engage regularly, preferably daily, in light to moderate physical activity for at least 30 minutes per day.

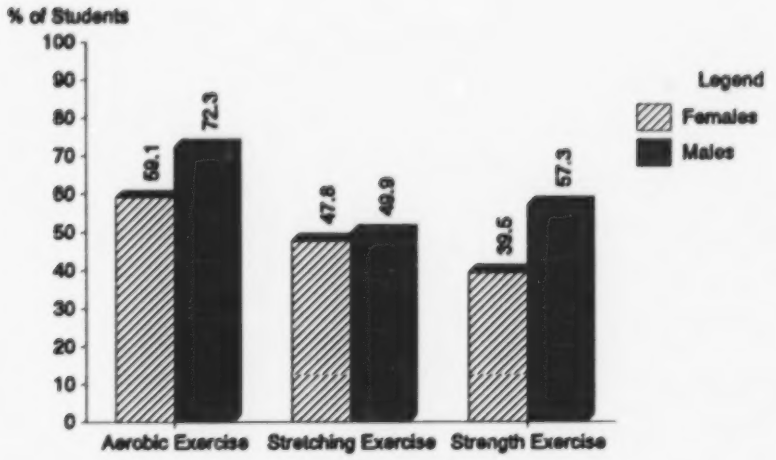
Increase to at least 75% the proportion of children and adolescents age 6-17 who engage in vigorous physical activity that develops and maintains cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.

Reduce to no more than 15% the proportion of people age 6 and older who engage in no leisure-time physical activity.

Increase to at least 40% the proportion of people age 6 and older who regularly perform activities that enhance and maintain strength, endurance, and flexibility.

New Mexico Data:

- 45.8% of students reported attending a physical education (PE) class on 3 or more days of an average week.
- Of students enrolled in a P.E. class, they reported on average participating in 30 minutes of exercise per class.
- 42.0% of students indicated that during the year they participated on at least one team run by the school and 34.4% of students indicated they participated on at least one team sponsored by some organization outside of school.



Percentages of Students Who Participated 3 or More Days in Exercise During the Past 7 Days

It appears that some students in New Mexico are getting adequate exercise; however, the proportion of students who are not getting enough exercise is significantly larger than the Year 2000 Objectives. Additionally, the amount of time that students report exercising in school-based P.E. classes is not sufficient to maintain or promote physical fitness.

SCHOOL HEALTH EDUCATION SURVEY RESULTS

SCHOOL HEALTH EDUCATION SURVEY RESULTS

The 1992 New Mexico School Health Education Survey asked administrators about the nature and extent of HIV prevention and health education currently being provided in their school. Such information as whether formal HIV prevention education was provided at the various grade levels, whether instruction was separate or in the context of a comprehensive school health curriculum, and the numbers of students participating in the instruction was collected. Additional information about the resources devoted to health education, the topics covered and strategies utilized during instruction, and barriers to implementation was collected.

HIV Education Instruction

Current health education research indicates that, at a minimum, effective HIV prevention education is characterized by continuing instruction throughout elementary, middle, and high school grades. Repeated exposure to health-related concepts and skills-building practice enables youth to successfully adopt behaviors to avoid the most significant mortality, morbidity, disability, and social problems during both youth and adulthood.

Effective HIV education programs are designed to:

- Focus the program's content on HIV-risk behaviors;
- Help students make more realistic risk estimates;
- Emphasize skill development relevant to HIV-risk situations;
- Use data on the normative behavior of peers;
- Devote at least 12 hours of classroom time to HIV education; and
- Provide HIV-relevant staff development for educators.

Figure 23 shows the percentages of New Mexico public schools reporting having provided some kind of HIV education in any grades seven through 12.

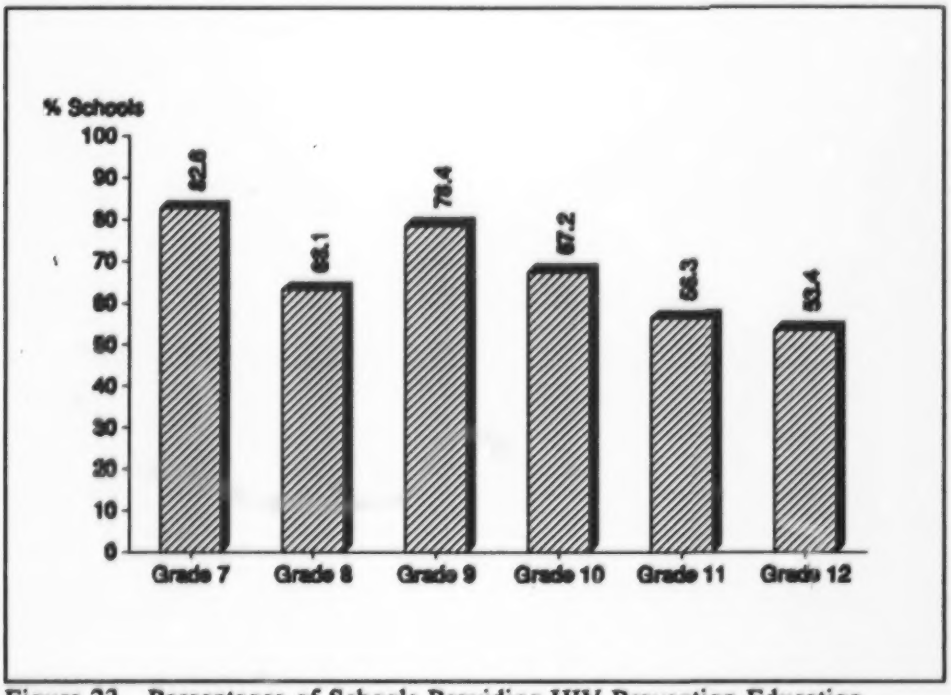


Figure 23. Percentages of Schools Providing HIV Prevention Education

It appears that in New Mexico, some kind of HIV education is provided in four of five schools in grades 7 and 9; approximately two-thirds of schools in grades 8 or 10; and approximately one-half of schools in grades 11 or 12. It is unclear whether this instruction is provided in more than one grade, or whether the instruction provided is effective in assisting students to adopt and maintain healthy behaviors.

Figure 24 shows the percentages of students receiving HIV prevention education in grades seven through 12.

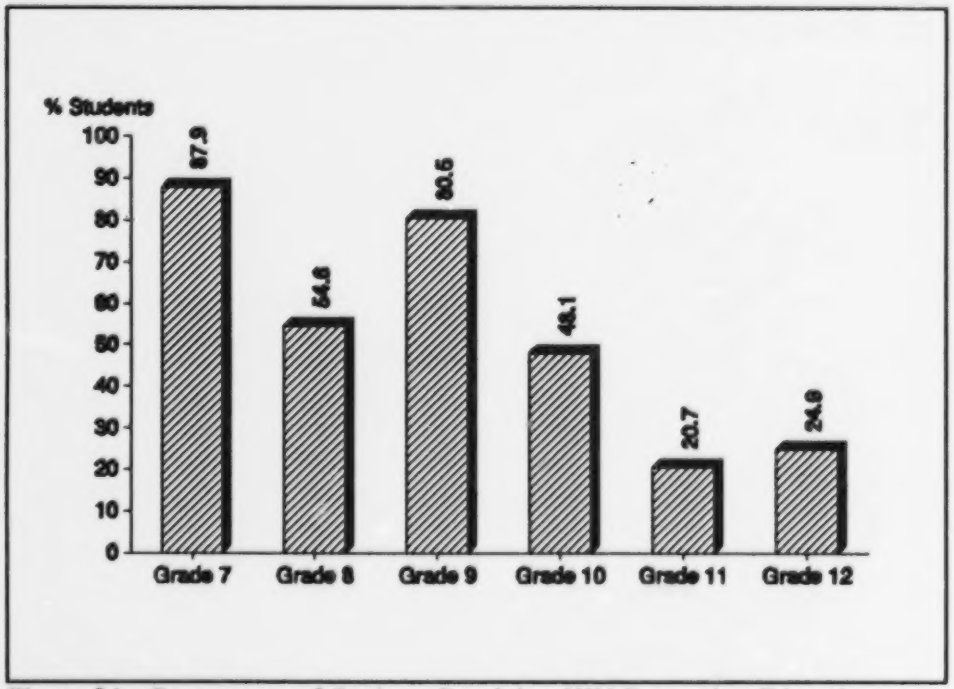


Figure 24. Percentages of Students Receiving HIV Prevention Education.

It appears that many students in grades seven and nine receive HIV education. Results indicate that a greater emphasis on providing HIV education for students in grades 11 and 12 is needed.

Health Education Instruction

Effective education for any category of health risk behavior is best accomplished within a comprehensive program that emphasizes behavior change and the development of risk-reduction skills. Successful programs include the following elements:

- Address each of the priority health risk behaviors;
- Incorporate skills-based curricula based on appropriate theory;
- Provide for adequate instructional time;

- Provide repeated exposure throughout all grades in school;
- Coordinate health education school-wide through qualified personnel; and should be
- Taught by persons who are adequately trained and interested in teaching about a variety of health topics.

Figure 25 shows the percentages of schools reporting having provided health education instruction during the 1991-1992 school year.

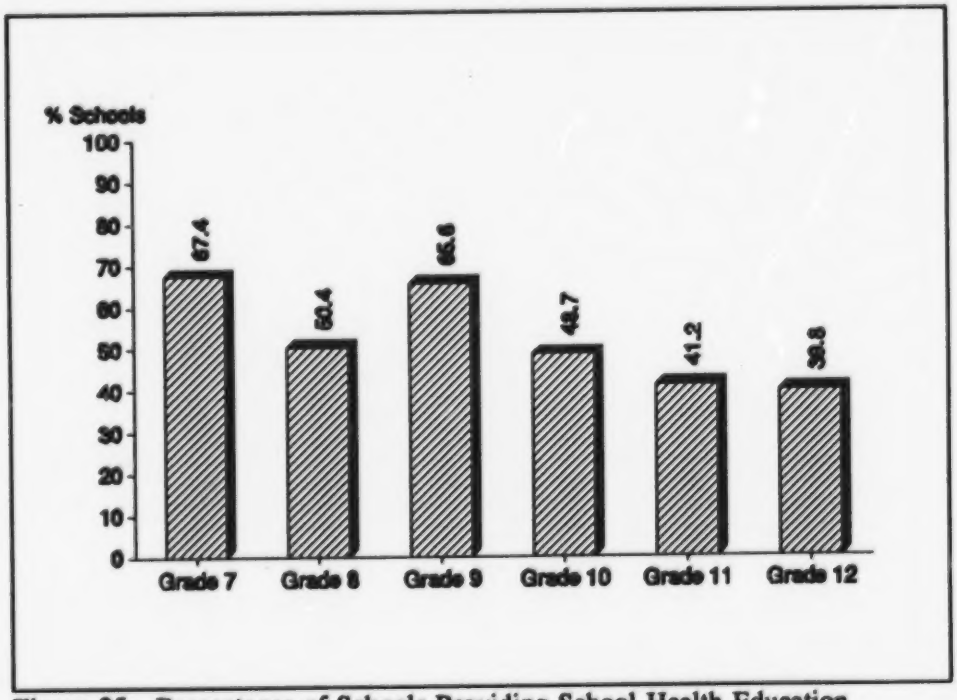


Figure 25. Percentages of Schools Providing School Health Education

It appears that some kind of health education is provided in two-thirds of New Mexico schools in grades 7 and 9; approximately one-half of schools in grades 8 and 10; and approximately two in five schools in grades 11 or 12. Figure 25 also indicates that a greater emphasis on providing such education for students in grades 11 and 12 is needed.

From Figure 26 it can be seen that approximately one-half of schools provide some kind of HIV education within the context of a comprehensive plan of health education to students in at least one of the grades seven through ten. Figure 26 indicates that a greater emphasis on providing such education for students in all grades is needed.

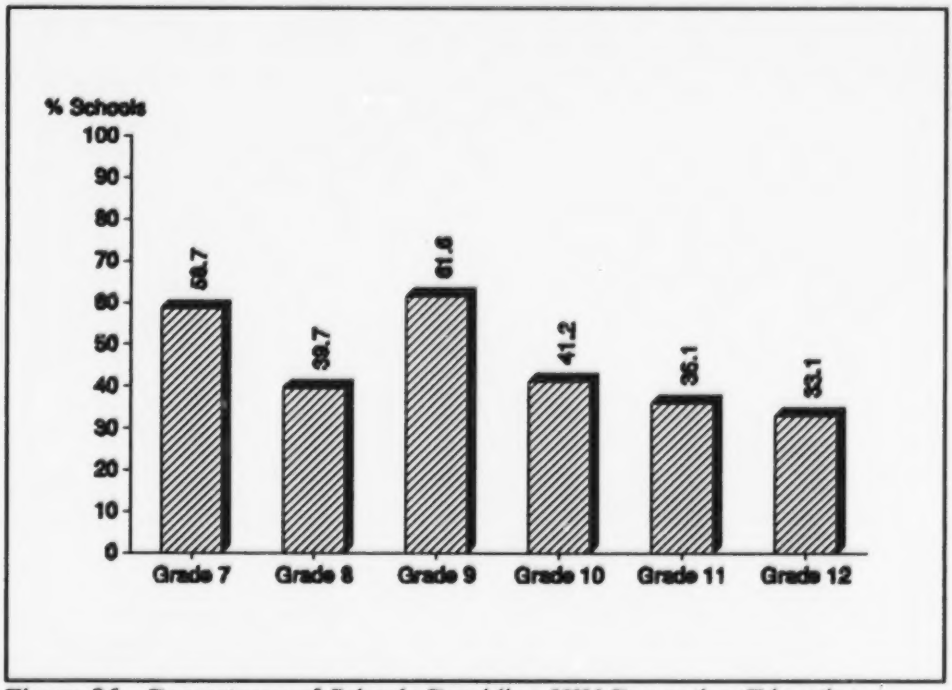


Figure 26. Percentages of Schools Providing HIV Prevention Education Incorporated Within School Health Education

When asked about the health education offered in their schools, respondents provided the following information:

- Two-thirds of principals reported that a formal health education class was offered.
- Two-thirds of principals reported that health education was required for advancement.
- In 70% of schools providing health education, nearly all students receive health education prior to advancement.
- Of schools providing health education, 64% offer a quarter or semester length class.
- 47% of teachers said their school had a formal system to coordinate health education.

Table 1 shows the percentages of all schools addressing each major health education topic, using specialized curricula, and providing skills-building practice within each topic area.

TABLE 1

PERCENTAGES OF RESPONDING SCHOOLS ADDRESSING MAJOR HEALTH EDUCATION TOPICS

Topic	Addressed as Part of Health Education	Specialized Curriculum Used	Skills Building Practice
• Injury	48	18	22
• Tobacco Use	58	25	37
• Alcohol and Other Drug Use	59	36	47
• Sexual Behaviors	54	28	44
• HIV Prevention	60	47	43
• Nutrition	50	15	22
• Physical Fitness	50	12	24
• Emotional and Mental Health	51	16	31
• Personal Hygiene	50	14	22
• Social and Environmental Health	44	13	24

It would appear that between 40% and 60% of New Mexico secondary schools address any of ten important health topics. A commercially developed curriculum plan is utilized by nearly one-half of schools to teach HIV prevention, and just over one-third of schools to teach about alcohol and other drug use. Skills-building practice was used to encourage healthy behaviors in fewer than one-half of schools for any topic.

From Table 1, while it appears that about one-half of New Mexico secondary schools provide some components of health education, results indicate that too few schools are providing comprehensive health education in ways that will be effective in assisting youth to

adopt healthy behaviors and avoid preventable health and social problems. The degree to which youth in New Mexico continue to engage in behaviors that lead to the most serious health and social problems of youth and adulthood indicates that current efforts are not as effective as needed. While many factors operate to promote effective health education in schools, properly designed and implemented health education instruction is crucial to the success of New Mexico's youth. Table 2 provides some indication of the barriers educators in New Mexico schools face in providing health education.

TABLE 2

PERCENTAGE OF SCHOOLS INDICATING EACH ITEM AS A BARRIER BY TYPE OF RESPONDENT

	Principals	Teachers
• Lack of money	54%	48%
• Lack of time	42%	44%
• Lack of appropriate curricula	22%	20%
• Lack of time to update or revise curriculum	24%	**
• Lack of staff expertise or comfort	32%	**
• Lack of training opportunities	31%	29%
• Community resistance	18%	**
• Lack of adequate textbooks	**%	22%
• Lack of audiovisual resources	18%	25%
• Class size	13%	**
• Crowded or inadequate facilities	**	19%
• Lack of facilities	9%	**
• Lack of access to community resources	8%	10%

It appears that principals and teachers agree the most important limiting factors in providing effective health education are time and money. A lack of staff training opportunities and a lack of appropriate curricula or resources to develop curricula are also seen as limiting factors. In New Mexico, it appears there is a need to stress the importance of health education to decision makers to encourage an adequate allocation of educational resources; provide additional opportunities for school staff to participate in health education inservice training; and begin to address the need for culturally appropriate comprehensive health education curricula.

SUMMARY AND CONCLUSIONS

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Results from the 1990 and 1991 New Mexico Youth Risk Behavior Surveys indicate that youth in New Mexico continue to engage in behaviors that put them at risk for the significant health and social problems of youth and adulthood. Effective school-based health education programs can reduce these behaviors and provide students with the opportunity to replace them with healthy behaviors. Results of the 1992 New Mexico School Health Education Survey indicate that while two of three schools provide health education, instruction may not be organized or delivered in ways that have been shown to be effective in assisting students to adopt healthy behaviors and avoid preventable health and social problems.

To reduce overall student risk, a health education program must be as comprehensive as possible and incorporate a coordinated, collaborative effort among schools, families, and the community. Communities can provide health-promoting programs to compliment and reinforce healthy behaviors learned at home or in school. Families can provide opportunities for youth to observe positive role models and reinforce healthy behaviors. Families can also:

- Acquire accurate information about the priority health risk behaviors;
- Answer questions honestly -- A good rule of thumb is "if they ask the question, they deserve an honest answer";
- Look for and use everyday events as "teachable moments" for passing along family messages about health and sexuality -- While many children hesitate to ask adults questions about sex, it is not due to lack of interest;
- Use TV, movies, books written specifically for kids, and other media to begin discussions about health issues;
- Find out what community resources are available and utilize them;
- Consider forming a support group in which parents can share concerns, ideas, and strategies with educators and other community members; and
- Encourage schools to provide health education programs that address the needs of youth and are based on current knowledge about health education.

Schools can:

- Address each of the priority health risk behaviors;
- Incorporate skills-based curricula based on appropriate theory;
- Provide for adequate instructional time;
- Provide repeated age-appropriate exposure throughout all grades in school;
- Coordinate health education school-wide through qualified personnel; and
- Teach through persons who are adequately trained and interested in teaching about a variety of health topics.

Characteristics of successful programs include skills-based curricula, adequate instructional time, and repeated exposure throughout all grades in school. In addition, teacher training and follow up, peer teacher assistants, parental support, and school-wide and community media programs are important elements of successful programs. Such programs have emphasized the development of skills and self-esteem, nurture social bonding to conventional units of socialization, and provide recognition and reinforcement for newly acquired skills and behaviors.

To provide students with the kinds of educational programs that will enable them to adopt healthy behaviors and avoid preventable diseases, the active support of school administrators, school board members, teachers, and parents will be needed.

For more information about effective health education programs and assistance in developing such programs in your district please contact the New Mexico State Office of Education.

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